

PATENT
Atty. Docket No. 37370-32

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

GARY WAYNE BAGNALL, ET AL.

Serial No.: 10/759,585

Filed: January 15, 2004

For: LIVE INSECT TRAP

Group Art Unit: 3643

Examiner: Rowan, Kurt C.

Conf. No.: 7985

APPEAL BRIEF
ON APPEAL TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Mail Stop Appeal Brief - Patent
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Appellants in the above-captioned patent application appeal the final rejection of claims 1-16 and 18-23 set forth in the Office Action mailed January 30, 2006. A Notice of Appeal and Pre-Appeal Brief Request for Review was timely filed on April 26, 2006, and a Notice of Panel Decision from Pre-Appeal Brief Review indicating that the Appeal should proceed to the Board of Patent Appeals and Interferences was mailed on June 8, 2006.

I. REAL PARTY IN INTEREST

The real party in interest in this application is Zoo Med Laboratories, Inc., pursuant to an assignment recorded on January 15, 2004, at reel 014906, frame 0048.

II. RELATED APPEALS, INTERFERENCES AND PROCEEDINGS

An Appeal previously was filed in this case, with the Notice of Appeal having been filed on May 3, 2005, and the Appeal Brief having been filed on July 1, 2005. In response, prosecution was reopened in the Office Action that was mailed January 30, 2006, from which the present appeal is taken.

III. STATUS OF CLAIMS

Claims 1-16 and 18-23 have been finally rejected and are the subject matter of this appeal. In accordance with 37 C.F.R. § 1.192(c)(9), a copy of the claims involved in this appeal is included in the Claims Appendix attached hereto.

IV. STATUS OF THE AMENDMENTS

No amendment has been filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Generally speaking, the present invention is directed to an apparatus for capturing live insects, such as the apparatus shown in Figures 1-4 of the Specification. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter. The apparatus also includes an enclosed lower section and a funnel between the

upper section and the lower section, with the funnel having a wide opening adjacent to the upper section and tapering to a narrow opening within the lower section. Each of the pending independent claims recites a different aspect of the apparatus, in addition to the foregoing general features of the invention. Examples of these features are provided by referencing the corresponding elements in the embodiment(s) shown in the Figures.

For instance, independent claim 1 recites the feature that the apparatus includes a removable funnel insert disposed within the funnel, restricting the narrow opening of the funnel to a smaller size. Thus, for example, funnel insert 94 and/or 96 shown in Figure 5 of the Specification may be inserted into funnel 90 to reduce the diameter of the lower opening 91 of funnel 90. The use of a removable funnel can allow a user to control the size of the opening, thereby trapping insects of a desired size.

Independent claim 2 recites the feature that the side walls of the upper section have an inner surface that is reflective. Referring to the embodiment shown in Figures 1-4, the interior surfaces of side walls 24 of upper section 20 would be reflective. See, e.g., page 4 lines 4-9. The light reflecting from such side walls, together with the light from the light source, often can confuse an insect that has found its way into the apparatus, decreasing the likelihood that the insect will be able to escape. See, e.g., page 2 lines 13-17.

Independent claim 7 recites the additional feature that the light source (e.g., 21) is an ultraviolet light source. See, e.g., page 4 lines 25-29. Such a light source has been found to be particularly effective in conjunction with the other recited components of the claimed apparatus.

Independent claim 10 recites the additional feature that the upper section (e.g., 20) has an outer surface that is substantially entirely dark. See, e.g., page 4 lines 3-4. The contrast provided by using such a dark outer surface can increase the likelihood that an insect will be attracted to the light source through the openings (e.g., 26) in the apparatus.

Independent claim 13 recites the additional feature of a cover that attaches to the enclosed lower section when the enclosed lower section is removed from the upper section. See, e.g., cover 66 attached to lower section 60 in Figure 5 (compare with lower section 60 in Figure 4). The use of such a cover can facilitate the transportation of live insects that have been captured in the lower section (e.g., 60) of the apparatus.

Claim 20 recites the additional feature that the openings (e.g., 26) cover approximately 30-40% of the total area that would be provided if the side walls (e.g., 24) were completely closed. See, e.g., page 4 lines 13-16 of the Specification. By providing such a quantity of openings in the upper section of an apparatus according to the present invention, an appropriate balance often can be struck between attracting insects in the first place and ensuring that they do not subsequently escape once they have entered the upper section.

The means-plus-function of claim 9 ("hanging means") corresponds, e.g., to ring 23, as shown in Figures 1-4 of the Specification.

VI. GROUNDS OF REJECTION

Claims 2 and 13 stand rejected under 35 USC § 102(b) over U.S. Patent 5,274,949 (Beaton); claims 3, 7, 10 and 20-23 stand rejected under § 103(a) over

Beaton; and claims 1, 4-6, 8, 9, 11, 12, 14-16, 18 and 19 stand rejected under § 103(a) over Beaton in view of U.S. Patent 5,363,589 (Flynn).

VII. ARGUMENT

Authority Pertaining to Issues on Appeal

Anticipation Rejections Under 35 USC § 102

The requirements for showing anticipation under § 102 are described in M.P.E.P.

§ 2131 as follows:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

With respect to a § 102 rejection, the Federal Circuit also has held that "The identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920, (Fed. Cir. 1989).

In addition, when inherency is asserted extrinsic evidence must be cited to show that the missing descriptive matter is necessarily present in the thing described in the reference:

To establish inherency, the *extrinsic evidence* [emphasis added] "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.* at 1269, 20 U.S.P.Q.2d at 1749 (quoting In re Oelrich, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981)).

In re Robertson, (Fed. Cir. 1999) 169 F.3d 743, 745; 49 U.S.P.Q.2d 1949.

Obviousness Rejections Under 35 USC § 103

The requirements for establishing a *prima facie* case of a § 103 rejection have been stated as follows.

"a proper analysis under § 103 requires, inter alia, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. [citing In re Dow Chemical Co., 837 F.2d 469, 473, 5 U.S.P.Q.2D 1529, 1531 (Fed. Cir. 1988).] Both the suggestion and the reasonable expectation of success must be found in the prior art, not in the applicant's disclosure."

In re Vaeck, 947 F.2d 488, 493 (Fed. Cir. 1991).

Thus, MPEP § 2142 requires that in order to establish a *prima facie* case of obviousness, the Examiner must cite prior art references that teach or suggest all of the claim limitations and, if more than one such reference is required to disclose all such limitations, there must be some suggestion or motivation, either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings.

Rejection under 35 USC § 102(b) Over Beaton

Claim 2

Independent claim 2 is directed to an apparatus for capturing live insects. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter.

The apparatus also includes an enclosed lower section and a funnel between the upper section and the lower section, with the funnel having a wide opening adjacent to the upper section and tapering to a narrow opening within the lower section. The side walls of the upper section have an inner surface that is reflective.

The foregoing combination of features is not disclosed by the applied art. In particular, Beaton does not disclose at least the feature of an upper section, as recited above, with side walls having an inner surface that is reflective.

With respect to this feature, the Examiner acknowledges that Beaton only discloses an upper section having transparent side walls. However, the Examiner goes on to assert:

. . . inherently, the inner surface of [Beaton's] side walls is somewhat reflective in that part of the light incident on the surface is reflected and the rest of the light is transmitted. For example, on a water surface, clearly part of the light is reflected and part of the light is transmitted. The amount of each depends on the surface. So even with a transparent surface as disclosed by Beaton, some of the light will be reflected.

Essentially, the Examiner is arguing that the inner surface of Beaton's side walls should be deemed "reflective" simply because it "inherently" is capable of reflecting some amount of light. In accordance with such a definition, all objects are "reflective", because every actual physical surface necessarily reflects some light. No real surface is perfectly non-reflective.

However, if every surface is "reflective", then the term "reflective" has no meaning or limiting effect at all. Such a definition is clearly unreasonable and is contrary to the case law. See, e.g., Deering Precision Instruments, L.L.C. v. Vector Distrib. Sys., 347 F.3d 1314, 1324 (Fed. Cir. 2003) (criticizing the district court's construction which effectively read a claim term out of the claims).

In any reasonable usage, surfaces are characterized by their dominant optical characteristics. For example, most people would consider an ordinary window to be transparent or optically transmissive, not "reflective" or for that matter "absorptive", even though some amount of light necessarily will be reflected off of its surface and some amount of light necessarily will be absorbed by it. Similarly, one would not call a mirror absorptive, even though it certainly will absorb some amount of the light that is incident upon it.

While the inner surfaces of Beaton's side walls certainly must reflect some amount of light, as every physical surface must, there is absolutely no indication in Beaton that such reflection is, or is intended to be, more than *de minimis*. Certainly, there is no indication that Beaton's side wall surfaces should be characterized as "reflective". As acknowledged by the Examiner, Beaton himself only characterizes such surfaces as "transparent" or "clear". See, e.g., column 1 lines 9-10 and 52-53, and column 2 lines 5-6 of Beaton.

Lacking this feature of the invention, claim 2 could not have been anticipated by Beaton. Accordingly, independent claim 2 is believed to be allowable over the applied art.

Claim 13

Independent claim 13 is directed to an apparatus for capturing live insects. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter. The apparatus also includes an enclosed lower section and a funnel between the upper section and the lower section, with the funnel having a wide opening adjacent to the

upper section and tapering to a narrow opening within the lower section. A provided cover attaches to the enclosed lower section when the enclosed lower section is removed from the upper section.

The foregoing combination of features is not disclosed by the applied art. In particular, Beaton does not disclose at least the feature of a cover that attaches to the enclosed lower section when the enclosed lower section is removed from the upper section.

Although the Examiner asserts that Beaton's cover 27 attaches to Beaton's lower section, there is no indication in Beaton that this is in fact the case. First, it is noted that claim 13 recites that the lower section is the portion of the apparatus in which the funnel tapers to a narrow opening. This apparently would correspond to Beaton's collection jar 24. Appellant is unable to find anything in Beaton that suggests that Beaton's clear plastic disc 27 is a cover that attaches to Beaton's collection jar 24 when collection jar 24 is removed from the upper section of Beaton's apparatus. In addition, the Examiner has cited no portion of Beaton in support of this assertion.

To the contrary, disc 27 is illustrated in Beaton's Figure 3 as attaching to Beaton's upper section. Apparently acknowledging this fact, the Examiner next argues that "it would have been obvious to provide Beaton with a cover to the enclosed lower section to prevent insects from escaping from the trap, noting it is obvious to rearrange to the parts of Beaton."

In response, Appellants first point out that the rejection of claim 13 is under § 102, not § 103, so arguments regarding obviousness are irrelevant. Moreover, nothing at all in Beaton would suggest moving plastic disc 27 from the top of Beaton's

upper section to the top of the lower section. To the contrary, it is apparent that disc 27 has a specific purpose within Beaton's device, i.e., to allow fluorescent tube 29 to extend into Beaton's upper section. For this purpose, it includes a hole 27'. Thus, even if disc 27 were moved to the top of Beaton's lower section, the presence of hole 27' would have made disc 27 largely ineffective as a cover "to prevent insects from escaping from the trap", as is asserted by the Examiner.

In short, there is no express or implied motivation to make the modification suggested by the Examiner, and any attempt to do so would not have resulted in the benefit that is being asserted by the Examiner. Accordingly, independent claim 13 is believed to be allowable over the applied art.

Rejection under 35 USC § 103(a) over Beaton

Claim 7

Independent claim 7 is directed to an apparatus for capturing live insects. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter. The apparatus also includes an enclosed lower section and a funnel between the upper section and the lower section, with the funnel having a wide opening adjacent to the upper section and tapering to a narrow opening within the lower section. The light source is an ultraviolet light source.

The foregoing combination of features is not disclosed or suggested by the applied art. In particular, Beaton does not disclose or suggest at least the feature of an ultraviolet light source.

With regard to this feature of the invention, the Examiner merely asserts that, "it would have been obvious to employ an old and well known ultraviolet light source for the known insect attracting properties." However, while ultraviolet lights clearly are conventional, there is nothing in the applied art that would have suggested incorporating an ultraviolet light into the apparatus described in Beaton. Without any such motivation to combine prior art features, a *prima facie* case of obviousness under the provisions of MPEP § 2142 cannot be established.

In the current final rejection, the Examiner asserts, "those skilled in the art know that insects are attracted to the wavelengths produced by an ultraviolet light source." However, nothing in the applied art has been cited in support of this assertion, and certainly nothing has been cited to show that ultraviolet light is more attractive to insects than to other types of light, as a general matter. In fact, if that were the case, then presumably Beaton would have mentioned the use of such a light source in his apparatus. However, in view of the current prior-art disclosures, nothing would have suggested replacing Beaton's light source with an ultraviolet light source.

Accordingly, independent claim 7 is believed to be allowable over the applied art.

Claim 10

Independent claim 10 is directed to an apparatus for capturing live insects. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter. The apparatus also includes an enclosed lower section and a funnel between the upper section and the lower section, with the funnel having a wide opening adjacent to the

upper section and tapering to a narrow opening within the lower section. The upper section has an outer surface that is substantially entirely dark.

The foregoing combination of features is not disclosed or suggested by the applied art. In particular, Beaton does not disclose or suggest at least the feature of an upper section, as recited above, having an outer surface that is substantially entirely dark.

The Examiner apparently acknowledges that Beaton does not disclose this feature of the invention. As noted above, Beaton itself describes its upper section as being clear or a transparent.

However, the Examiner asserts, "it would have been obvious to provide a dark color on the outside of the upper section to provide a contrast and the dark color would contrast with the clear of the lower portion and insects would be attracted to this contrast." This asserted motivation is not found anywhere in Beaton (and the Examiner does not even allege that it is), but rather it is merely hindsight based on Appellants' own Specification. Any such arguments are clearly improper in connection with an obviousness rejection. See, e.g., In re Vaeck, *supra*.

The Examiner also asserts that, "a transparent sleeve can be colored [emphasis added]," but then immediately acknowledges, "Still, Beaton does not disclose a dark color on an outer surface of the upper section."

As noted above, the standard for obviousness is not whether a prior-art reference can be modified to achieve the invention, but whether the prior art teaches all of the claimed elements and provides the motivation to combine them in the manner claimed.

It should be added that Beaton does not even remotely suggest an outer surface that is substantially entirely dark, as presently recited.

In short, the present rejection is based entirely on assertions of obviousness that are not supported by anything in the prior art. Accordingly, independent claim 10 is believed to be allowable over the applied art.

Claim 20

Independent claim 20 is directed to an apparatus for capturing live insects. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter. The apparatus also includes an enclosed lower section and a funnel between the upper section and the lower section, with the funnel having a wide opening adjacent to the upper section and tapering to a narrow opening within the lower section. The openings cover approximately 30-40% of the total area that would be provided if the side walls were completely closed.

The foregoing combination of features is not disclosed or suggested by the applied art. In particular, Beaton does not disclose or even remotely suggest at least the feature of openings in the side walls of an upper section, as recited above, covering approximately 30-40% of the total area that would be provided if the side walls were completely closed.

The Examiner acknowledges that Beaton does not disclose this feature of the invention and that Beaton appears to show a smaller area enclosed by his openings. However, the Examiner then goes on to assert, "the amount of area enclosed by the openings is a matter of design choice to be determined through routine experimentation

since no stated problem is solved." No justification has been provided for such an assertion, and there is absolutely no suggestion in Beaton that one should experiment with the sizes of the openings to obtain better results. Without such a suggestion, there would have been no motivation for one of ordinary skill in the art to engage in such "routine experimentation".

As noted above, the recited amount of openings has been found to provide the greatest efficiency in capturing insects. However, nothing in Beaton would have disclosed or suggested this feature of the invention.

Accordingly, independent claim 20 is believed to be allowable over the applied art.

Claim 3

Claim 3 depends from independent claim 2 and recites the further limitation that the inner surface of the side walls is white. This additional feature of the invention is not disclosed or suggested by the applied art.

As to this limitation, the Examiner acknowledges that Beaton's sleeve 21 is clear. However, the Examiner then asserts, "it would have been obvious to employ a white inner surface of the sleeve since the insects are attracted to light colors." The Examiner provides no support for this assertion.

In addition, the Examiner does not point to anything in Beaton that would have suggested the desirability of altering the inner surface of the side walls of Beaton's sleeve 21 in any manner to achieve the goal of attracting insects to them. In short, there would have been no motivation to modify Beaton's apparatus as suggested by the Examiner.

For these additional reasons, dependent claim 3 is believed to be allowable over the applied art.

Claim 21

Claim 21 depends from independent claim 20 and recites the further limitation that the light source comprises an ultraviolet light. This additional feature of the invention is not disclosed or suggested by the applied art.

No specific grounds are set forth by the Examiner with respect to this rejection. However, it is assumed that the Examiner is making the same arguments as were made with respect to independent claim 7. Accordingly, for the same reasons set forth above in connection with the discussion of claim 7, those grounds are believed to be inappropriate.

For such additional reasons, claim 21 is believed to be allowable over the applied art.

Claims 22 and 23

Claim 22 depends from independent claim 20 and claim 23 depends from independent claim 7. Both recite the further limitation that the side walls of the upper section have an inner surface that is reflective. This additional feature of the invention is not disclosed or suggested by the applied art.

No specific grounds are set forth by the Examiner with respect to this rejection. However, it is assumed that the Examiner is making the same arguments as were made with respect to independent claim 2. Accordingly, for the same reasons set forth above in connection with the discussion of claim 2, those grounds are believed to be inappropriate.

For these additional reasons, claims 22 and 23 are believed to be allowable over the applied art.

Rejection under 35 USC § 103(a) over Beaton in view of Flynn

Claims 1, 4-6, 8, 9, 11, 12, 14-16, 18 and 19

Independent claim 1 is directed to an apparatus for capturing live insects. An upper section of the apparatus houses a light source, and has side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter. The apparatus also includes an enclosed lower section and a funnel between the upper section and the lower section, with the funnel having a wide opening adjacent to the upper section and tapering to a narrow opening within the lower section. A removable funnel insert is disposed within the funnel, restricting the narrow opening of the funnel to a smaller size.

The foregoing combination of features is not disclosed or suggested by the applied art. In particular, no permissible combination of Beaton and Flynn would have disclosed or suggested at least the feature of a removable funnel insert disposed within another funnel, restricting the narrow opening of such other funnel to a smaller size.

With regard to this feature, the Examiner acknowledges that Beaton does not show a removable funnel insert disposed within another funnel. However, in order to make up for this deficiency, the Examiner asserts that Flynn, "shows an insect trap having a funnel 32 and a funnel insert 30 as shown in Fig. 2."

However, Flynn itself describes elements 30 and 32 as different portions of the same passageway 12. See, e.g., column 3 lines 33-38. Nothing in Flynn indicates that upper portion 30 and lower portion 32 are different funnels, or that Flynn's apparatus includes a removable funnel insert disposed within another funnel.

Even the Examiner does not assert that either element 30 or 32 is a "removable funnel", as presently recited (emphasis added). Moreover, as noted above, the Examiner even expressly acknowledges that Beaton does not disclose or suggest this feature of the invention.

As also noted above, MPEP § 2142 requires that in order to establish a *prima facie* case of obviousness, the Examiner must cite prior art references that teach or suggest all of the claim limitations. Lacking the referenced feature of the present invention, no permissible combination of Beaton and Flynn would have rendered independent claim 1 obvious.

Accordingly, independent claim 1, together with its dependent claims 4-6, 8, 9, 11, 12, 14-16, 18 and 19, is believed to be allowable over the applied art.

VIII. CONCLUDING REMARKS

As Appellants have shown above, for a number of reasons, nothing in the cited references discloses, teaches, or suggests the invention recited by the claims on appeal. Appellants therefore respectfully submit that the claimed invention is patentably distinct over the applied art.

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In view of the foregoing remarks, Appellants respectfully request that the rejection of claims 1-16 and 18-23 be reversed and a Notice of Allowance issued.

Respectfully submitted,

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Dated: September 8, 2006

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CLAIMS APPENDIX

Claims on Appeal

1. An apparatus for capturing live insects comprising:
 - (a) an upper section having side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter;
 - (b) an enclosed lower section;
 - (c) a funnel between the upper section and the enclosed lower section, wherein the funnel has a wide opening adjacent to the upper section and tapers to a narrow opening within the lower section;
 - (d) a light source housed within the upper section; and
 - (e) a removable funnel insert disposed within the funnel, restricting the narrow opening of the funnel to a smaller size.

2. An apparatus for capturing live insects comprising:
 - (a) an upper section having side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter;
 - (b) an enclosed lower section;
 - (c) a funnel between the upper section and the enclosed lower section, wherein the funnel has a wide opening adjacent to the upper section and tapers to a narrow opening within the lower section; and
 - (d) a light source housed within the upper section,wherein the side walls of the upper section have an inner surface that is reflective.

3. An apparatus according to claim 2, wherein the inner surface of the side walls is white.
4. An apparatus according to claim 1, wherein the openings in the side walls comprise vertical slots.
5. An apparatus according to claim 1, wherein the wide opening of the funnel forms substantially all of the bottom surface of the upper section when said apparatus is fully assembled.
6. An apparatus according to claim 1, wherein the enclosed lower section screws into the upper section.
7. An apparatus for capturing live insects comprising:
 - (a) an upper section having side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter;
 - (b) an enclosed lower section;
 - (c) a funnel between the upper section and the enclosed lower section, wherein the funnel has a wide opening adjacent to the upper section and tapers to a narrow opening within the lower section; and
 - (d) an ultraviolet light source housed within the upper section.

8. An apparatus according to claim 1, wherein the light source is a fluorescent lamp.
9. An apparatus according to claim 1, further comprising a hanging means attached to the top cover for hanging said apparatus.
10. An apparatus for capturing live insects comprising:
 - (a) an upper section having side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter;
 - (b) an enclosed lower section;
 - (c) a funnel between the upper section and the enclosed lower section, wherein the funnel has a wide opening adjacent to the upper section and tapers to a narrow opening within the lower section; and
 - (d) a light source housed within the upper section,wherein the upper section has an outer surface that is substantially entirely dark.
11. An apparatus according to claim 1, wherein the enclosed lower section is removable from the upper section.
12. An apparatus according to claim 11, wherein when the enclosed lower section is removed from the upper section the funnel remains covering the enclosed lower section.

13. An apparatus for capturing live insects comprising:
 - (a) an upper section having side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter;
 - (b) an enclosed lower section;
 - (c) a funnel between the upper section and the enclosed lower section, wherein the funnel has a wide opening adjacent to the upper section and tapers to a narrow opening within the lower section;
 - (d) a light source housed within the upper section; and
 - (e) a cover that attaches to the enclosed lower section when the enclosed lower section is removed from the upper section.
14. An apparatus according to claim 1, wherein the funnel is seated within the enclosed lower section.
15. An apparatus according to claim 1, wherein the lower section is optically transmissive.
16. An apparatus according to claim 1, wherein the funnel is optically transmissive.
17. (Canceled)

18. An apparatus according to claim 1, wherein the only passage between the upper section and the enclosed lower section is through the funnel.

19. An apparatus according to claim 1, wherein the funnel tapers at an angle of at least 45° from horizontal.

20. An apparatus for capturing live insects comprising:

- (a) an upper section having side walls, a top cover, and plural openings in the side walls that are large enough to permit insects to enter;
- (b) an enclosed lower section;
- (c) a funnel between the upper section and the enclosed lower section, wherein the funnel has a wide opening adjacent to the upper section and tapers to a narrow opening within the lower section; and
- (d) a light source housed within the upper section,

wherein the openings cover approximately 30-40% of the total area that would be provided if the side walls were completely closed.

21. An apparatus according to claim 20, wherein the light source comprises an ultraviolet light.

22. An apparatus according to claim 20, wherein the side walls of the upper section have an inner surface that is reflective.

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23. An apparatus according to claim 7, wherein the side walls of the upper section have an inner surface that is reflective.

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EVIDENCE APPENDIX

None

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RELATED PROCEEDINGS APPENDIX

None